Attachment—Additional Questions for the Record

Subcommittee on Communications and Technology Hearing on "Accountability and Oversight of the Federal Communications Commission" May 15, 2019

The Honorable Michael O'Rielly, Commissioner, Federal Communications Commission

The Honorable Anna G. Eshoo (D-CA)

- 1. During the worst fire in California's history, Verizon throttled the data speeds of Santa Clara County firefighters, hindering their ability to communicate.
 - a. If the 2015 Open Internet Order wasn't repealed, could this practice have been considered a violation of the ban on "unjust and unreasonable" business practices?

Response: The 2015 Title II Order's no-throttling rule prohibited impairment or degradation of lawful Internet traffic based on *content*—not *data usage*. Since the example cited involved the latter and not the former type of impairment, the anti-throttling rule would not have been applicable. As for being a potential violation under the ban on "unreasonable interference or unreasonable disadvantage" for Internet conduct, it is practically impossible to know the answer; that standard was extremely vague and open-ended and gave the Commission's Enforcement Bureau wide interpretive discretion. In contrast, the Commission's 2017 Restoring Internet Freedom Order rightfully reinstated the Federal Trade Commission's jurisdiction over Internet service providers, thus closing a significant gap in consumer protection created by the flawed 2015 Order.

b. Has the FCC taken any actions to avoid a repeat of this issue in California and other parts of the country by Verizon or other ISPs?

Response: Thanks to the FCC's decision in the Restoring Internet Freedom Order to reinstate the FTC's historical enforcement authority and expertise over competition and consumer protection in the Internet ecosystem, consumers are protected from anticompetitive, unfair, and deceptive practices.

2. Under the 2015 Open Internet Order, the FCC could investigate possible violations of bright-line prohibitions of net neutrality and other "unjust and unreasonable practices."

a. Since the 2017 Restoring Internet Freedom Order, has the FCC been investigating whether ISPs are engaging in blocking, throttling, or paid prioritization practices, both as disclosed by ISPs and undisclosed practices?

Response: Investigations related to ISP transparency requirements are handled by the FCC's Enforcement Bureau; therefore, I must defer to the Commission's Enforcement Bureau on this question.

b. If not, would the FCC even know if "Over the past year, the Internet has remained free and open," as Chairman Pai stated on January 2, 2019?

Response: Consumers and advocates who scrutinize every action of ISPs have not produced demonstrable evidence of consumer or network harm in the aftermath of the Restoring Internet Freedom Order. The free and open Internet flourished prior to the introduction of net neutrality rules, and it has remained free and open in the absence of burdensome Title II mandates.

- 3. The National Verifier has launched in 16 states where it lacks access to any databases for state-administered programs, such as the Supplemental Nutrition Assistance Program and Medicaid. Should an individual be informed that the National Verifier was not able to confirm their eligibility, they could reasonably consider this a denial from Lifeline, even though they may be eligible.
 - a. Given these issues, what specifically is the FCC or USAC doing to ensure the National Verifier connects with state databases in the states where it has launched or where it is planning to launch, and what is the timeline to do so?

Response: Issues related to the launch of the National Verifier system have been delegated to the Wireline Competition Bureau and USAC; therefore, I must defer to those entities on specific implementation issues. To the extent that appropriate and relevant issues are brought before the full Commission, I would certainly support efforts to ensure that a robust and accurate system is in place.

b. Given the above issues regarding the rollout of National Verifier, why is the FCC pushing forward to launch in more states rather than focusing on improving connections to federal and state databases in states where National Verifier is currently deployed?

Response: See previous response.

4. As the FCC considers USTelecom's petition for forbearance from key provisions of the Telecommunications Act of 1996, what has the FCC done to consider the impact of granting this petition on (i) small and medium-sized ISP's building out the fiber networks

needed for upgrading our country's wireless infrastructure to 5G and for closing the digital divide; and (ii) federal, state, local, and tribal government agencies, particularly those that will continue to rely on TDM-based telephone services through the continued availability of resale requirements?

Response: I have approached this proceeding with an open mind and will apply the requisite forbearance analysis in conformity with Section 10 of the Telecommunications Act. Accordingly, my door has always been open to stakeholders that currently rely on UNE elements, and I have closely reviewed the record in this proceeding.

- 5. Should the FCC further eliminate media ownership rules as it is considering, Americans may experience a sharp reduction in the breadth and diversity of voices available in any local media market. One entity could control all broadcast TV stations, local newspapers, and radio stations. This is a direct rebuke to a fundamental value that underpins our democracy. Please share whether you are considering such outcomes and to what degree you have concerns about the consolidation of media ownership.
 - a. Has the FCC's newly created Office of Economic Analysis provided input on the impact of eliminating media ownership rules on consumer prices in the video marketplace?

Response: The realities of the current marketplace clearly demonstrate that the Commission's historical siloed approach to the broadcast market is completely outdated. In fact, it was the Commission's own ownership rules barring cross-ownership of newspapers that contributed to some degree to the decline of many local newspapers. Further, regarding radio and television, the competition broadcasters face from streaming and other over-the-top (OTT) providers for advertising dollars and listeners/viewers has eviscerated the appropriateness of viewing broadcasters through such a narrow, siloed lens. Specifically, when it comes to the radio subcaps under consideration in the Quadrennial Review, I am following the arguments for where best to establish new cap limits, if at all, on FM station ownership, but I have few hesitations about the prospect of further acquisitions by stations in general, and certainly not when it comes to AM stations. The long-term survival of many radio stations will depend upon their ability to combine into larger groups and achieve the scale needed to compete with the virtually unregulated streaming and OTT providers.

While I do not direct the work of the OEA, my understanding based on conversations with their staff, is that they are provided ample opportunity to analyze all the relevant issues related to each item that the Commission considers.

6. The FCC is considering a proposal to alter what may be considered toward the statutory maximum of five percent franchise fees (MB Docket No. 05-311). This would negatively impact the access of communities to public, educational, and governmental (PEG) programming. As I stated in my February 22, 2019 letter to the FCC, Congress clearly intended for communities to have access to PEG. The legislative history of the 1984

Cable Act explicitly states that franchise fees are only made up of monetary payments and do not include PEG contributions (H.R. Rep. No. 98-934 (1984)). Congress made its intent on this matter explicit and clear.

a. Under what statutory authority is the FCC considering this proposal which would have the effect of including PEG contributions in franchise fees?

Response: Given the level of detailed analysis regarding this matter in the notice of proposed rulemaking to which you are referring, I would point you to the discussion beginning on page nine, which provides an extensive discussion of the Commission's interpretation of the relevant statute, Section 622(g)(2) of *The Communications Act of 1934*, codified at 47 U.S.C. § 542(b).

The Honorable Yvette D. Clarke (D-NY)

- It is wonderful to see how technology has broken down barriers for people with disabilities, but I am concerned this same technology can introduce new challenges for consumers. As the FCC considers moving to fully Automated Speech Recognition or ASR, I am concerned that fully automated ASR might not work as well for certain types of accents or voices. This could become a serious problem as we move towards widespread adoption of such services. Certain consumers might be left behind.
 - a. What has the FCC done to investigate whether fully automated ASR for IP CTS does not feature implicit or inadvertent bias?

Response: I am fully committed to fulfilling our statutory mandate to provide functionally equivalent service to Americans with disabilities while minimizing burdens on TRS ratepayers. Thus, I have supported experimentation with alternative technologies, including ASR. While not perfect for all IP CTS consumers in all instances, ASR can undoubtedly be a helpful tool for certain segments of users, and technology has improved in recent years. In allowing service providers to use fully automated ASR, the Commission has made clear that providers using ASR must meet the Commission's minimum TRS standards. Further, the Commission continues to support IP CTS providers that do not use fully-automated ASR, thus ensuring that non-ASR options continue to be available to consumers.

b. Will you commit to undertake such studies before certifying an ASR only provider?

Response: Should a draft Order to certify an ASR-only provider be circulated to the Commission, I will fully examine the applicable record prior to voting to grant the certification.

2. In considering the UST petition, does the Commission have the flexibility to take into account disparate market conditions or is it required to simply approve the petition as filed? Does the Commission have the flexibility to consider the impact of a natural disaster in a local market, such as Hurricane Maria in Puerto Rico, and how the local market conditions were and still are being impacted post-hurricane?

Response: In applying its forbearance analysis under Section 10, the Commission's precedent allows us to take into account disparate market conditions, if the record supports doing so. Further, the Commission has determined that it is authorized to grant partial forbearance, rather than the full extent of relief sought, and has done so several times in the past.

3. Will the Commission take into account the special circumstances of how Hurricane Maria devasted the local telecom infrastructure, as well as the local economy, into its consideration of the UST petition and whether such deregulation should occur at this time in Puerto Rico?

Response: My staff and I have met with stakeholders who described the special circumstances in Puerto Rico and USVI as a result of Hurricane Maria. I am aware of their concerns as they relate to the US Telecom forbearance petition, and I will apply the requisite forbearance pursuant to my statutory obligation, based on a thorough analysis of the record.

- 4. The Telecommunications Act of 1996 did not preempt local regulatory bodies from the Commission's evaluation of whether a market was competitive or not and thus warranted certain regulatory relief.
 - a. Will you give deference to the input from the local jurisdictions as to whether the local market conditions warrant deregulation at this time, particularly in the case Puerto Rico where the recovery efforts are still ongoing?

Response: While I am considering the input of all parties describing granular market conditions in the context of the forbearance petition, the decision of whether to grant forbearance and to what extent belongs solely to the FCC, not local governments.

The Honorable Tony Cárdenas (D-CA)

- 1. It sounds to me like everyone is aligned on the need to improve the Commission's broadband data collection and mapping methods. Form 477 asks ISPs if they "could" provide coverage in addition to asking if they actually do.
 - a. What is the value behind asking what areas "could" be served within the normal course of business?

Response: The Form 477 data has been used for different purposes, both inside and outside the Commission, and I have been a longtime skeptic of this data to the extent that it has been used for purposes for which it was not designed or intended. While I was not at the Commission when the current framework was established, perhaps this particular parameter might assist in forecasting future broadband deployment, particularly in the business data services context.

The Honorable Darren Soto (D-FL)

- 1. Late last year, the FCC initiated a proceeding looking at how to mitigate space debris. While I think it is a positive step to consider how to address this problem, the Commission may not have the technical expertise or the resources necessary to develop or enforce the complicated regulations it is considering proposing. Further, I understand the FCC has requested a reduced budget for these activities in FY20.
 - a. Do you agree that it is important to ensure that any orbital debris mitigation regime be straightforward and enforceable?

Response: Generally, I believe that any and all regulations imposed on industry by the Commission should be relatively straightforward and enforceable. In the context of orbital debris, however, I acknowledge that the complexity of the issue may require more tailored solutions, but satellite entities must still understand in advance what is expected of them. I also acknowledge that other federal agencies possess technical expertise on this matter, and ideally, the Commission would work in tandem with these entities to develop a coherent and effective policy. However, these agencies have not adopted orbital debris policies, and the FCC is in the process of authorizing multiple constellations consisting of thousands of small satellites. If these agencies fail to act, the Commission will have to do so as part of its review of these NGSO applications in order to mitigate the potential calamities resulting from existing or future orbital debris.

b. Please provide me with the number of employees supporting this project in total and the number of employees on this project with undergraduate or graduate degrees in relevant technical fields, specifically: aerospace, aeronautical, and/or astronautical engineering. Given the reduced budget you are requesting for FY20, is the FCC able to hire additional technical experts with degrees in these fields?

Response: Issues regarding the allocation of Commission resources are decided by the FCC Chairman; therefore, I must defer to him on this question.

2. What is the FCC currently doing to ensure that minority programmers are being included by providers; especially in Metropolitan Statistical Areas (MSA) with large minority communities that are currently being underserved?

Response: Addressing issues related to diversity in media has been a priority under the leadership of Chairman Pai. For example, in August of last year, the Commission adopted an order to implement an incubator program to make it easier for new entrants to join the radio broadcasting industry, and I have called for a similar program to be adopted for the television

broadcast industry. Specifically, with respect to independent programmers, the Commission already has in place robust regulations that restrict providers from demanding a financial interest or exclusivity in exchange for carriage, or from discriminating against unaffiliated programmers on the basis of non-affiliation. Pursuant to these regulations, a number of complaint proceedings have been adjudicated by the Commission's Media Bureau in a timely fashion since 2017. Beyond these steps, the Commission would likely need further statutory authority to take other actions on this matter.

The Honorable Robert E. Latta (R-OH)

1. When Congress passed the Americans with Disabilities Act in 1990, it directed the Commission to ensure that hearing and speech-impaired individuals be able to place and receive assisted telephone calls. Congress also directed that these telecommunications relay services be paid for equitably - with intrastate assessments used to fund interstate relay services.

The Commission chose to "temporarily" fund the entire telecommunications relay service program through only interstate (and international) assessments and then repeated that "temporary" funding approach in 2007 when internet protocol service calls (IP CTS) were added to the program.

As I understand it, last year the Commission proposed in its Further Notice of Proposed Rulemaking (FNPRM) on IP CTS to revise the funding mechanism so that all IP CTS calls would be recovered from all providers of, intrastate, interstate and international telecommunications, interconnected VOIP and non-interconnected VOIP providers.

Commissioner O'Rielly, would you support moving the provisions of the 2018 FNPRM related to correcting the "temporary cost recovery method" expeditiously to create a permanent method in advance of the 2020-2021 TRS Fund year?

Response: While I am sympathetic to the point you raise, as I have expressed in the past, IP CTS is in my view fundamentally an interstate service; therefore, I am concerned that expanding the base of TRS contributors to include intrastate providers is outside the scope of the Commission's existing legal authority. Further, expanding the contribution base in this manner would potentially have an impact on the Commission's progress on jurisdictional separations, an increasingly anachronistic and unnecessarily burdensome process in our transition to an IP-driven industry. As an aside, I see certain services, such as non-interconnected VoIP offerings, as fundamentally different than many other communications products, and I would be concerned about attempts to treat them otherwise.

2. My concern is about how we deliver broadband to all Americans, especially unserved and underserved Rural America. One technology will not be the panacea for this challenge, but we will need a combination of solutions. Can you comment on what role you see spectrum playing in rural America and discuss if you think spectrum sharing is a feasible part of that solution?

Response: Spectrum-based services, including both terrestrial wireless and satellite offerings, will likely play a large role in providing broadband to unserved America. Deployment of these services is far more economical and feasible than trying to lay fiber to the most remote parts of the country. Both exclusive use licenses and sharing models have been used – and will continue to be used – to bring service to rural America. While my primary objective is to clear spectrum for exclusive use licenses, as we are considering in the current 3.7-4.2 GHz proceeding, sharing makes sense in those bands where it is infeasible to relocate or accommodate all incumbents elsewhere, such as the 6 GHz band, which is under consideration by the Commission.

The Honorable Greg Walden (R-OR)

1. Would you support the Chairman's effort to move forward in evaluating appropriate allocation of the 5.9 GHz band at this time? Why or why not?

Response: Yes; I have been a loud voice for the need to conduct a review of the 5.9 GHz band since I joined the Commission. We cannot continue to allow valuable spectrum, which has generally been unused for two decades, to continue to lay fallow.

Since this spectrum was allocated for automobile safety systems, technology has evolved and many of the auto safety uses have been implemented using other spectrum-based services, requiring a fresh look at this band. First, even if DSRC is to be deployed, a rulemaking is needed because the Commission's existing rules are based on a twenty-year-old standard that needs to be updated at a minimum. Second, many automobile manufacturers want to deploy a different technology, commonly called C-V2X, for their safety systems, so the Commission needs to take this into consideration. Third, this spectrum, which is adjacent to the 5 GHz unlicensed band, is much needed to expand unlicensed operations, such as Wi-Fi. The Commission must consider all these issues to ensure that these frequencies are efficiently used and, to the extent that they are used by the auto industry, that they are only used for safety-of-life applications.

The Honorable John Shimkus (R-IL)

1. Under the FCC's oversight, the Universal Service Administrative Company (USA) has worked to establish a "National Verifier" system to combat fraud in the Lifeline program by ensuring all applicants are eligible for Lifeline benefits. It is my understanding USAC is actively transitioning many states from "soft-launch" status, in which participation in the National Verifier system is voluntary, to a mandatory verification system. I want to ensure that we expeditiously continue this transition to a more secure and accurate verification system. Please describe how the FCC, working with USAC, will continue the push for implementation of a robust mandatory National Verifier system.

Response: Issues related to the launch of the National Verifier system have been delegated to the Wireline Competition Bureau and USAC; therefore, I must defer to those entities on specific implementation issues. To the extent that appropriate and relevant issues are brought before the full Commission, I would certainly support efforts to ensure that a robust and accurate system is in place.

The Honorable Gus M. Bilirakis (R-FL)

1. Commissioner O'Rielly – the 1996 Telecommunications Act states that temporary, competition jumpstarting price controls should be scaled back once the intended competition is created. Over the past 23 years, the voice and broadband market has completely changed.

Is the market sufficiently competitive to reassess these price controls, at least on a geographic basis?

Response: Facilities-based competition has arisen in many markets via differing paths, and in some cases without the assistance of the 1996 Act's provisions. Over the years I have supported Commission actions to remove regulatory asymmetry and permit the expansion of free enterprise in those instances consistent with our statutory authority and obligations. As there is currently a Commission-level item pending on forbearance from the 1996 Act's unbundling provisions, it may be best if I decline to comment on my determination in that proceeding until a later time when the content of the item becomes public.

2. The Commission recently issued a Notice of Proposed Rulemaking to allow unlicensed, indoor wifi use of the 6HGz band. There seems to be widespread agreement that additional spectrum is needed for indoor unlicensed applications but there are questions about whether increasing unlicensed spectrum across the entire 6GHZ band would cause harmful interference t incumbent outdoor licensees.

A group of home builders stated in the record that ever-increasing energy-efficiency building codes established by the Department of Energy (DoE) directly impact wireless penetration of a building's outer envelope. This could impact whether or not the proposed indoor use would cause outside interference. The Leading Builders of America showed that many materials found to impact wireless penetration, such as brick and metal, increasingly go into new homes in order to comply with energy efficiency requirements in building codes.

Commissioner O'Rielly – would it be advisable to set up a working group between the DoE's Office of Energy Efficiency and Renewable Energy and the FCC's Office of Engineering and Technology to help understand better the interaction between modern building codes and indoor ireless? Would you be willing to contact the DoE to consider a working group on this topic?

Response: I absolutely believe that the Commission needs to explore whether and how modern building codes and materials affect the propagation and attenuation of wireless signals. Although within the purview of the Chairman, if asked, I would be pleased to have discussions

with DOE to explore this topic and obtain the data the Commission needs to inform its decision making, whether it be through a working group, formal proceeding or another mechanism.

The Honorable Susan W. Brooks (R-IN)

1. I firmly believe that letting the private sector compete is the best way to ensure the U.S. will be the world leader in 5G technology. Can you address criticisms of that idea and the notion that the U.S. should nationalize a wholesale 5G network to somehow ensure its leadership in this space?

Response: I absolutely agree that the U.S. should continue to allow the private sector to invest in and build out our wireless networks, and that competition is the reason why the U.S. is the leader in wireless technologies. Those who argue that we should abandon this highly successful approach appear to argue that (1) an expeditious buildout of 5G can only be done by one entity, (2) a standalone wholesale 5G network is the only way to ensure a secure system, and (3) this is the way to stop China's goal of 5G dominance. These assertions are fatally flawed, which I discussed in depth in a recent blog on the matters, which can be located online at https://www.fcc.gov/news-events/blog/2019/05/07/substantive-objections-government-5g-wholesale-network

The Honorable Tim Walberg (R-MI)

- 1. As you know, broadband mapping has been a concern among a bipartisan group of Representatives and Senators. As the Commission contemplates future reverse auction mechanisms within the USF program, it is important that the Commission not only improve its own maps but also coordinate with other Federal agencies on their mapping of broadband availability and broadband support mechanisms tied to such mapping. I appreciate your leadership in taking initiative to update the Commission's map, and I look forward to the completion of the FNPRM in WC Docket No. 11-10.
 - a. During the hearing, you stated that, "absent Congressional, statutory language, [other agencies] have a tendency to go their own route."

As Congress contemplates authorizing new or additional authority on broadband mapping and coordination:

i. How do we ensure that definitions of "unserved," "underserved," and "served" are appropriately tailored to prevent this duplication, while allowing agencies to continue offering broadband support that appropriately complements other agencies' efforts?

Response: While I will always defer to the will of Congress, I believe that any new broadband subsidies should be targeted toward reaching unserved populations, rather than areas where service already exists. In addition, agencies should not use scarce public funds to overbuild existing networks. To prevent duplication and waste, new broadband funding should be restricted by statute to completely unserved populations; the definition of "unserved" ought to be expressly spelled out; and legislation should explicitly prohibit funding from going to areas already receiving support under existing programs, including the Commission's Connect America Fund. Further, a challenge process ought to be established before any new funding goes out the door.

ii. How do we ensure that definitions of "broadband" are tailed such that agencies cannot evade the intent of potential statutory authorities to comply with coordination?

Response: The definition of broadband should be uniform across the federal government. One way to ensure that other agencies do not engage in wasteful gold-plating would be to require other agencies to adopt the FCC's definition of broadband. Moreover, this definition shouldn't fluctuate until every American has the opportunity to access broadband. Otherwise, funding will inevitably flow to upgrading those areas that are easier and cheaper to serve, rather than

addressing those without broadband today. While this may appear to create a static situation, on balance it is a worthy and necessary tradeoff in bringing access to the unserved.

iii. How do we ensure that different types of data collected by various agencies are driven by minimally acceptable levels of granularity so that agencies can standardize data collection and reduce instances of overbuilding?

Response: I certainly agree that it is important to balance the appropriate level of granularity of the underlying data with the applicable costs and benefits. In my view, this should be addressed legislatively to ensure uniformity across the federal agencies. Additionally, to ensure accuracy, any mapping effort must incorporate a challenge process.

2. During the hearing, I briefly asked about the need for a more robust, capable workforce for the communications industry. As you know, even with unlimited spectrum, siting reforms, or Federal dollars, none of these will get 5G, next generation fiber networks, or broadcasting infrastructure into the market without a skilled, professional workforce capable of deploying it in a timely manner.

How is the Commission approaching this workforce issue, and what steps can the Commission take to get all stakeholders to the table and create good, high-paying jobs that maintain technological leadership here in the United States?

Response: The need for a robust and well-trained workforce is an issue I raised early in my Commission tenure as part of the Commission's broadcast incentive auction repack. It came to my attention that the number of tower crews trained to climb the tallest broadcast towers was not sufficient to perform a timely repack. While the Commission's authority is limited in this area, I have spoken to and worked with industry trade associations, such as the Wireless Infrastructure Association, CTIA, NAB, and others, to ensure that programs are in place to provide adequate training for such high-skilled – and oftentimes hazardous – jobs. Furthermore, the Chairman has created a working group, as part of his Broadband Deployment Advisory Council (BDAC), to explore this very issue.

b. Would the Commission benefit from a longer-term viewpoint and approach to this issue if it were elevated and authorized in statute to a full advisory committee as opposed to a working group under an existing advisory council?

Response: To the extent the Commission has a role, it appears that this issue is being adequately considered as part of the BDAC charter, which can be extended by the Commission, if necessary. But, if there is a need, the Chairman has the ability also to create a separate advisory committee on the matter.

3. As you know, our valuable spectrum resources have only become increasingly important as more market entrants seek access to provide new or important services. Additionally, incumbents providing valuable services have enjoyed an expectation of renewal, and they have traditionally been made whole for any transition to comparable facilities—both spectrum or otherwise.

Consistent with the Commission's statutory mandate to assign licenses, "if public convenience, interest, or necessity will be served thereby...", it is important for the Commission to have a full, robust record in order to make such a determination. With regard to the Commission's open proceeding on the 6 GHz band, have all interested parties—including incumbents—fully participated in the Commission's process—whether through *ex parte* presentations, providing technical engineering studies to the Office of Engineering and Technology (OET) regarding the proposed Automatic Frequency Coordination (AFC) mechanism, or filing in the record?

Response: Given the Commission's open process, it appears that there is a robust record in the 6 GHz proceeding, and stakeholders, including incumbents, continue to file ex partes and studies supporting their positions. Further, I have had many meetings with interested parties on both sides of the various issues raised in this proceeding, including the use of the AFC for indoor access points, such as in-home Wi-Fi routers.

4. One of the concerns with the USF program—often articulated by smaller, rural providers like those in my district—is the reporting or regulatory burden on those providers. As you know, however, eligible telecommunications providers have several requirements that help the Commission that root out waste, fraud and abuse.

When it comes to the problem of overbuilding, would you recommend adding an eligibility requirement to ETCs that they disclose whether, and how much, if any, support they receive through the Department of Agriculture's or other Federal broadband support programs?

Response: I firmly believe that we must do everything we can to prevent government-subsidized overbuilding, and I have encouraged Congress to establish clear legislative guardrails to ensure that any new broadband funding go only to unserved Americans. Agencies ought to determine if an area is already funded before awarding new support. Adding an eligibility requirement to ETCs to disclose their support from other federal broadband programs may be helpful to some degree for dealing with inter-agency overbuilding. However, it may be of limited assistance in addressing when a specific agency funds more than one provider in a given area using multiple of its own accounts, as in cases where USAC approves E-Rate and High Cost funding in the same service area.

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¹ 47 U.S.C. 307(a)

a. Since providers often use USF support and RUS support in complementary ways, would such a requirement be more helpful if paired with requirements to disclose whether another provider is receiving funds to construct or operate a network within an ETC's footprint so the Commission could investigate before making an award under the USF program?

Response: In awarding support through the High Cost program, the FCC has traditionally excluded areas already served by a non-USF-subsidized competing provider. To identify those areas, the Commission has relied on, albeit flawed, Form 477 data, which may not adequately capture whether another provider is receiving funds from another agency to construct or operate a network within a given area. While I have supported the use of challenge processes to help correct flawed data and have advocated for clear rules governing inter-agency coordination, requiring ETCs to make such a disclosure (provided they have access to the requisite information) may help in preventing duplicative awards in certain instances.

5. While the Commission is not and should not be the lead Federal agency responsible for the cyber security of our communications networks, the Commission can still play an important role in the integrity and security of those networks. When it comes to 5G and next generation mobile networks, one of the principal ways to achieve security is through the adoption of open-source, merit-based, voluntary industry standards—like 3GPP or IEEE.

However, our strategic competitors have begun to weaponize these international standards bodies to advance their security agenda, and the U.S. is at risk of failing to keep up with the scale and sophistications of contributions made by researchers and engineers from our strategic competitors. In order to maintain U.S. leadership, we must continue to send our best and brightest to these standards bodies to keep pace in leadership posts and merit-based contributions.

a. To that end, what is the Commission doing to promote our U.S. industry in these conferences, and is there more the Commission could do to bolster these efforts?

Response: I am well aware of certain countries' attempts to use standards setting bodies, such as 3GPP and IEEE, and multi-stakeholder organizations, such as the ITU, to advance their goals, which can run counter to the interests of the United States. In fact, I have discussed these problems publicly multiple times, including in speeches and blogs. In the context of the various standards setting bodies, the FCC and other government agencies have representatives who attend these meetings. The Commission should ensure that our representatives attend all meetings and vote on issues of importance to U.S. industry. Moreover, the Commission also should continue to work with industry so that we are aware when they have concerns with any particular standard setting process. When it comes to ITU conferences, and the World Radiocommunications Conference (WRC) in particular, the FCC continues to promote 5G, advocate for the adoption of our 5G spectrum bands and technical rules internationally, and ensure our future leadership in next-generation wireless technologies. Unfortunately, as has been

reported in the press, other federal agencies have not been supportive of the FCC and Administration's 5G agenda, but we also continue to work with them to find common positions.

b. Who else should be involved in these efforts?

Response: It is important that all U.S. wireless providers, manufacturers, and trade associations are active in this important matter. In the standards setting bodies, each entity has a vote. Therefore, the chances of success are increased if more U.S. companies attend these meetings. Similarly, each country has one vote in ITU conferences and preparatory meetings, so the U.S. needs to advocate for and convince the majority of the 193 member nations to support our specific positions. To be successful, we need an active and aggressive U.S. wireless industry to attend WRC and the preparatory meetings to provide their insight and expertise.

6. The Commission has been very vocal about the need for more mid-band spectrum in order to maintain U.S. leadership in 5G. While the Commission is contemplating action in the L-Band, 2.5 GHz, C-Band, and 4.9 GHz band, the CBRS Band is much further along to commercial deployment. Industry is ready to go, with several ESC systems approved and being deployed. Yet the Spectrum Access Systems are still awaiting FCC approval. What is the Commission's outlook on getting these final certifications finalized and getting the spectrum to market?

Response: I agree that the process of getting the Spectrum Access Systems approved and deployed has taken longer than expected. Unfortunately, the completion of the testing by NTIA's ITS was delayed, but on June 21, 2019, ITS sent the draft final reports on the lab testing to potential SAS operators. They have a chance to review them before they are finalized and submitted to the FCC and DOD for review and final certification. I am hopeful that FCC staff and DOD will be able to finish the review of these reports expeditiously, allowing for the final certifications of these systems. It is my expectation that this can be completed by early September.